What You Should Know About Your Drinking Water Supply

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2016 Water Quality Report

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Introduction: The City of Cumberland is pleased to present to you this year's Annual Water Quality Report detailing all contaminant information collected between January 1 and December 31, 2015. The report is designed to inform you about the quality water services delivered to you every day. Our goal is to provide you with a safe and dependable drinking water supply. We want you to be aware of the efforts we make to continually improve the water treatment process and to protect our water resources. The City of Cumberland analyzes its drinking water for all parameters outlined in the National Primary Drinking Water Regulation: Consumer Confidence Report 40 CFR 141 unless a waiver has been granted by Maryland Department of the Environment and/or Pennsylvania Department of Environmental Protection. The City also analyzes for many unregulated chemical compounds. Parameters and compounds that were detected in treated water over the calendar year are displayed in the 2015 Water Quality Data Chart.

Where Does Your Drinking Water Originate: The water for the City of Cumberland is surface water originating from the Lake Koon and Gordon reservoirs located in the Cumberland Valley Township, Bedford County, Pennsylvania. The primary tributaries supplying water to the reservoirs are Evitts Creek, Growden Run, Oster Run as well as several unnamed tributaries.

Water Treatment: Surface water treatment facilities like Cumberland's are designed and operated to take a raw water source of variable quality and produce consistent high quality drinking water. Multiple treatment processes are provided in series and each process represents a barrier to prevent the passage of particulate matter, cysts and other microbial contaminants. Our Water Treatment Facility utilizes barriers which include clarification, filtration, and disinfection.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pickup substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial
 processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In accordance with the Drinking Water Act Amendments, Maryland Department of the Environment and Pennsylvania Department of Environmental Protection has prepared a **Source Water Assessment Plan** for the Evitts Creek Watershed. The Plan evaluates the existing land use and water quality conditions, describes potential contamination threats as well as providing background to support ongoing efforts to protect the watershed through the Evitts Creek Steering Committee (ECSC). The ECSC meets on a quarterly basis. Contact the Cumberland Engineering Division at 301-759-6604 for more information.

Water Conservation: Our water resources are not unlimited – they are affected everyday by precipitation, population growth, economic development and pollution. The most cost-effective way to protect your water resources is through conservation. For more information on water usage and conservation practices, please contact the Cumberland Engineering Division at 301-759-6604. Visit http://www.epa.gov/watersense/ for water conservation tips, facts, information, and online activities for you and your family.

2015 Water Quality Data Chart

Regulated Parameters	Units	Cumberland Water Filtration Plant	Ideal Goals (EPA's MCLG)	Highest Level Allowed (EPA's MCL)	Typical Sources of Contaminant	
Turbidity (max. monthly avg.)	NTU	0.04	N/A	IT	Soil run-off	
Turbidity (max. reported)	NTU	0.09	N/A	1.0		
Total Coliform Bacteria	P/A	A	0_	+	Naturally present in the environment	
Barium .	ppm	0.0367	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	
Chloramines (avg)	ppm	2.4	MRDL 4	MRDL 4	Water additive used to control microbes	
Chloramines (range)	ppm	1.7 - 2.8	MRDL 4	MRDL 4		
Chlorine (avg)	ppm	0.2	MRDL 4	MRDL 4	Water additive used to control microbes	
Chlorine (range)	pom	0.1 - 0.3	MRDL 4	MRDL 4		
Fluoride (average)	ppm	0.57	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.	
Fluoride (max reported)	ppm	0.83	4	4		
Nitrate	ppm	0.583	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Gross Alpha	pCi/L	2.96	0	15	Erosion of natural deposits	
Di (2-Ethylhexyl) Phthalate	ррь	5	0	6	Discharge from rubber and chemical factories	
Total Organic Carbon	N/A	met TT **	N/A		Naturally occurring in the environment	

^{**}Total Organic Carbon Treatment Technique (TT) compliance was achieved through a waiver obtained from Maryland Department of the Environment and Pennsylvania Department of Environmental Protection. As per CFR 141.135(a)(2) an alternative Step 2 TOC removal requirement was provided in consistency with all other National Primary Drinking Water Regulations.

Lead & Copper Data - MD Distribution	System			-			
Copper (2014)	ppm	0.19	1.3	1.3 (AL)			
Lead (2014)	ppb	0	0	15 (AL)			
Lead , Copper & Cyanide Data - PA Dist		stem		1 29 (72)	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household		
Copper (2013)	ppm	0.0373	1.3	1.3 (AL)	plumbing systems.		
Lead (2013)	ppb	<0.001	0	15 (AL)	7		
Disinfection Byproduct - MD Distribu				I I (AL)			
Total Trihalomethanes (avg)	ppb	46	N/A 80				
Total Trihalomethanes (LRAA)	ppb	46		80	By-product of drinking water disinfection		
Total Trihalomethanes (range)	ppb	24 - 57					
Haloacetic Acids (avg)	ppb	39	N/A	60			
Haloacetic Acids (LRAA)	ppb	39					
Haloacetic Acids (range)	ppb	4 - 47					
Disinfection Byproduct - PA Distribut		7					
Total Trihalomethanes (avg)	ppb	36	N/A	80	By-product of drinking water disinfection		
Haloacetic Acids (avg)	ppb	41	N/A	60			
Unregulated Parameters				73.0			
oH (range)	S.U.	7.00 - 7.83	N/A	N/A			
Hardness	ppm	112	N/A	N/A	Naturally occurring in the environment		
<u>sodiu</u> m	ppm	5.57	N/A	N/A			

DEFINITIONS

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allows in drinking water. MCL's are set as close to the MCLG's as feasible using best available treatment technology

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety

Maximum Residual Disinfectant Level (MRDL) - Set by the USEPA -The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water

Walver, Variance, or Exception - State or EPA permission not to meet an MCL or a treatment technique under certain conditions

NTU -	Nephelon	etric Turb	idity		

pCi/L - Picocuries per liter (a measure of radioactivity)

ppb - Parts per billion

ppm - Parts per million

P/A - Presence/Absence

S.U. - Standard Units

LRAA - Locational running annual average

NA - Not Applicable

*Not more than one (1) positive sample if less than 40 samples collected

General Drinking Water Information: Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. See the 2015 Water Quality Data Chart that summarizes water testing results for the 2015 calendar year.

Additional Information Regarding Lead: In 1992 EPA created new standards for acceptable levels of lead and copper in drinking water. Elevated levels of lead can cause

serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

The City of Cumberland – Utilities Division is responsible for providing high quality drinking water, but cannot control the variety of materials used in home plumbing components. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

FOR MORE INFORMATION OR QUESTIONS: Please contact the City of Cumberland's Environmental Specialist at 301.759.6604 for additional information regarding this report. This information is also available at the City of Cumberland's web site at www.ci.cumberland.md.us.

Other water distribution systems in your area include: LaVale Sanitary Commission at 301-729-1638 Allegany County Sanitary District at 301-777-5942

